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10/582,435

06/09/2006

Rene L. Cruz

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EXAMINER

PHAN, MAN U

ART UNIT

PAPER NUMBER

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/582,435	Applicant(s) CRUZ, RENE L.	
	Examiner Man Phan	Art Unit 2475	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-12 and 16-19 is/are allowed.
- 6) ☒ Claim(s) 1-4, 13-15, 20-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment and Argument

1. This communication is in response to applicant's 01/10/2011 Amendment in the application of Cruz for “**RESOURCE SHARING BROADBAND ACCESS SYSTEM, METHODS, AND DEVICES**” filed 6/9/2006. This application is a national stage entry of PCT/US04/42696 , International Filing Date: 12/17/2004, and Claims Priority from Provisional Application 60531475, filed 12/19/2003. The amendment and response have been entered and made of record. Claims 1-34 are pending in the present application.

2. Applicant's amendment to the rejected claims are insufficient to distinguish the claimed invention from the cited prior arts or overcome the rejection of said claims under 35 U.S.C. 103 as discussed below. Applicant's remarks with respect to the pending claims have been fully considered, but they are not persuasive for at least the following reasons.

3. In response to Applicant's argument regarding rejection of claims 22-27 under 35 USC 101. Claims 22-27 are rejected under 101 because the phrase “*...software stored on a computer readable medium...*” recited in the claims is not a non-transitory form of signal transmission indicating in the claim or specification or in the record. Therefor claims 22-27 are considered to be a signal per se. To overcome this rejection, it is suggested applicant change “computer readable medium to ---machine readable storage medium being a non-transitory signal ---.

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4. In response to Applicant's argument that the reference does not teach or reasonably suggest the functionality upon which the Examiner relies for the rejection. The Examiner first emphasizes for the record that the claims employ a broader in scope than the Applicant's disclosure in all aspects. In addition, the Applicant has not argued any narrower interpretation of the claim limitations, nor amended the claims significantly enough to construe a narrower meaning to the limitations. Since the claims breadth allows multiple interpretations and meanings, which are broader than Applicant's disclosure, the Examiner is required to interpret the claim limitations in terms of their broadest reasonable interpretations while determining patentability of the disclosed invention. See MPEP 2111. In other words, the claims must be given their broadest reasonable interpretation consistent with the specification and the interpretation that those skilled in the art would reach. See *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000), *In re Cortright*, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999), and *In re American Academy of Science Tech Center*, 2004 WL 1067528 (Fed. Cir. May 13, 2004). Any term that is not clearly defined in the specification must be given its plain meaning as understood by one of ordinary skill in the art. See MPEP 2111.01. See also *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989), *Sunrace Roots Enter. Co. v. SRAM Corp.*, 336 F.3d 1298, 1302, 67 USPQ2d 1438, 1441 (Fed. Cir. 2003), *Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1298 67 USPQ2d 1132, 1136 (Fed. Cir. 2003). The interpretation of the claims by their broadest reasonable interpretation reduces the possibility that, once the claims are issued, the claims are interpreted more broadly than justified. See *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). Also, limitations appearing in the specification but not recited in the claim are not read into the claim.

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See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, the failure to significantly narrow definition or scope of the claims and supply arguments commensurate in scope with the claims implies the Applicant intends broad interpretation be given to the claims. The Examiner has interpreted the claims in parallel to the Applicant in the response and reiterates the need for the Applicant to distinctly define the claimed invention.

5. Applicant asserts that there is no motivation to combine the prior art as proposed in the office action, i.e. Kotzin (US#7,113,771) and Fischer (US#2006/0203841). In response, the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. In *re Nomiya*, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. In *re McLaughlin*, 170 USPQ 209 (CCPA 1971). It must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. In *re McLaughlin*, 443, F.2d 1392; 170 USPQ 209 (CCPA 1971). Furthermore, on page 13, last paragraph, Applicant's argument with respect to the claims 1, 4, 12-15 on which the Applicant relies in the Fig. 1B and the specification as filed. However, It is the claims that define the

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claimed invention, and it is claims, not specifications that are anticipated or unpatentable.

Constant v. Advanced Micro-Devices Inc., 7 USPQ2d 1064.

Since no substantial amendments have been made and the Applicant's arguments are not persuasive, the claims are drawn to the same invention and the text of the prior art rejection can be found in the previous Office Action. Therefore, the Examiner maintains that the references cited and applied in the last office actions for the rejection of the claims are maintained in this office action.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 22-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, specifically, as directed to "a gateway device implemented in software stored on a computer readable medium" or "a software routine". The claimed "computer readable medium" or "software routine" of claims 22-27 is non-statutory as at no time in the claim does applicant define the software routine. The claimed machine readable storage medium reads on non-statutory embodiments of computer readable media drawn to signals. As signals are not a tangible medium, the instant claims 22-27 does not recite a tangible result in a form that is useful to the user of the process. The phrase "computer-readable medium" recited in the claim is not a non-transitory form of signal transmission indicating in the claim or specification or in the record. Therefor claim 22-27 is considered to be a signal per se.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-4, 28-29 and 13-14, 30-31, 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotzin (US#7,113,771) in view of Fischer (US#2006/0203841).

With respect to claims 1, 34, the reference discloses a novel system and method for resource sharing among a plurality of clients within a common wireless communication network, according to the essential features of the claims. Kotzin (US#7,113,771) discloses method for providing shared communication resource access (See the Abstract; Figs 1-9 and Col.), Kotzin discloses the steps of: establishing a network of clients (Fig. 4; 106A-106N; Col.), wherein the clients comprise separate residential units or business units; providing a communication protocol between the network of clients (Figs. 1, 4-5, 7 and Col.). It's also noted that It is well known to one of skill in the art that wired connectivity to internet accesses (such as cable, xDSL, fiber, Ethernet) have been commercially available for both residential and business for many years (official notice is taken).

However, Kotzin does not disclose expressly wherein at least a plurality of the clients in the network of clients have a their own associated communication resource connection; wherein providing a protocol for sharing the communication resource connections of the at least some of the clients to the network of clients; and spreading communications from a client in the network

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of clients among the communication resource connections of the at least a plurality of the clients in the network. In the same field of endeavor, Fischer (US#2006/0203841) teaches establishing a network of clients wherein at least a plurality of the clients in the network of clients have their own associated wired resource access connection (Fischer: Fig 2, LAN network with clients of laptop, PDA, PC, etc., pars 0025-27, their own associated wired resource access connection being provided individual network card to communicate with the network hardware 46); providing a protocol for sharing the wired resource access connections of the at least some of the clients to the network of clients with the aid of the base-station (Figs 1,3, pars 0027, 0030, 0034); and spreading communications (Fig 3), with aid of the base-station, from a client in the network of clients among the wired resource access connections of the at least a plurality of the clients in the network (Figs 1-3, pars 0026-0027, indicating the shared communication medium 102 may be a shared twisted pair connection, a shared optical connection, a shared coaxial connection, or a shared frequency spectrum, e.g. either wired or wirelessly connected with multiple wired and wireless protocols. Devices may transmit a frame to a base station for other devices to process the frame with a first protocol over the shared media (e.g. with base station's aid for resource sharing scheme).

Therefore, consider Kotzin and Fischer's teachings as a whole, it would have been obvious to one of skill in the art at the time of invention to modify Kotzin's method by incorporating Fischer's teachings in sharing communication resources in multiple communication protocols with both wireline and wireless networks..

Regarding claims 2, 29, Kotzin as modified discloses the method of claim 1, wherein the communication protocol between the network of clients and the base-station comprises a

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wireless protocol that is implemented via a wireless medium; and wherein one or more clients in the network of clients comprises one or more computers interconnected by a LAN (Kotzin: FIG 1, FIG 4-5, and FIG 7 and the respective sections describing these figures in the disclosure including wireless protocol of IEEE802.11, Bluetooth, and various cellular air interface protocols, etc.).

Regarding claims 3-4, Kotzin further teaches wherein the communications resource access comprises Internet access the communication resource connections of the network of clients comprise Internet access connections, and network of clients comprises a wireless community (Kotzin: Fig. 1. 104, 107A-107D; Fischer: Fig. 1; para. para. [0020]-[0021], [0027]).

Regarding claim 28, it's noted that the use of Encryption may be provided by the device or software to protect client sessions from other clients in the wireless community are well known in the art. Furthermore, the proxies may utilize encryption in their joint communications as a way to provide security for communications of clients with respect to other clients in the wireless community.

Regarding claims 13, 14, Kotzin as modified discloses a method for providing shared communication resource access (Kotzin: Figs 1-9 and Col), the method comprising steps of: Pooling the Internet access connections of a community of clients into a resource available for bursts of traffics to a client in the community of clients by a network medium and protocol shared among the groups of clients (Kotzin: Figs 1, 3, a base station aiding the resources sharing, a plurality of proximal wireless devices (e.g. clients), col 1, line 58 - col 2, line 24, col 6, lines 35-67, also Fischer: Figs 2-3), wherein the clients comprise separate residential units or business units (Fischer: Figs 2-3); and dividing bursts of traffic to or from a client of the community of

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clients across the Internet access connections created by the step of pooling.). It's also noted that It is well known to one of skill in the art that wired connectivity to internet accesses (such as cable, xDSL, fiber, Ethernet) have been commercially available for both residential and business for many years (official notice is taken).

Regarding claim 30, it's noted that the use of Encryption may be provided by the device or software to protect client sessions from other clients in the wireless community are well known in the art. Furthermore, the proxies may utilize encryption in their joint communications as a way to provide security for communications of clients with respect to other clients in the wireless community.

Regarding claim 31, Kotzin as modified discloses the method of claim 13, wherein one or more clients in the network of clients comprises one or more computers interconnected by a LAN (Kotzin: FIG 1, FIG 4-5, and FIG 7 and the respective sections describing these figures in the disclosure including wireless protocol of IEEE802.11, Bluetooth, and various cellular air interface protocols, etc.).

10. Claims 15, 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotzin in view of Fischer, and further in view of US 6,119,162, Li (hereinafter Li).

Regarding claims 15, 20-21, Kotzin as modified discloses the method of claim 13, but is silent on wherein accepting client session request for a session with a device outside of the community of clients. In the same field of endeavor, Li teaches that a proxy software can be utilized to initiate a session among clients, either in the wired network or outside the network and reroute (redirect) the network traffic through the proxy software (e.g. communication protocol)

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for internet access using one or more telephone lines (Li: col 2, lines 24-65, col 5, line 63--col 6, line 3), and capable of making session requests and receiving the packets, and forwarding the packet to the client etc. among the clients in the network or outside the network (e.g. for local and remote clients) (Li: col 2, lines 24-65, col 4, line 66 - col 5, line 11, col 8, lines 30 - 50, col 11, lines 43-53, any client can serve as a server or gateway).

Consider Kotzin as modified and Li's teachings together, it would have been obvious to one of skill in the art at the time of invention to apply commercially available proxy software and protocol in Kotzin as modified's method of resources sharing and enabling each client acting as a proxy server and facilitating communication spreading and sharing among different clients.

Allowable Subject Matter

11. Claims 5-12, 16-19 are allowable.

12. The following is an examiner's statement of reasons for the indication of allowable subject matter: The prior art of record fails to disclose or suggest wherein the steps of providing a protocol for sharing comprises: accepting client session requests for a session with a device outside of the network of clients; and providing a proxy between the device outside of the network of clients and a client requesting a client session; wherein the step of dividing comprises choosing one of the Internet access connections based upon usage patterns, as specifically recited in the claims.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP ' 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Phan whose telephone number is (571) 272-3149. The examiner can normally be reached on Mon - Fri from 6:00 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dang Ton, can be reached on (571) 272-3171. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

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15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at toll free 1-866-217-9197.

Mphan

Mar. 11, 2011

/Man Phan/

Primary Examiner, Art Unit 2475

Search Notes (continued)

Application/Control No.

10/582,435

Examiner

Man Phan

Applicant(s)/Patent under
Reexamination

CRUZ, RENE L.

Art Unit

2475

SEARCHED

Class	Subclass	Date	Examiner
370	328-352	3/10/2011	MP
	431-461		MP
455	414-455		MP
709	223-229		MP

INTERFERENCE SEARCHED

Class	Subclass	Date	Examiner

**SEARCH NOTES
(INCLUDING SEARCH STRATEGY)**

	DATE	EXMR
EAST/WEST search update (search 370, 455, 709 classes)	3/10/2011	MP